



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/826,297	04/19/2004	Craig A. Branch	026746.101-US02	9817

26853 7590 10/09/2007
COVINGTON & BURLING, LLP
ATTN: PATENT DOCKETING
1201 PENNSYLVANIA AVENUE, N.W.
WASHINGTON, DC 20004-2401

EXAMINER

LAMPRECHT, JOEL

ART UNIT	PAPER NUMBER
----------	--------------

3737

MAIL DATE	DELIVERY MODE
-----------	---------------

10/09/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/826,297

Applicant(s)

BRANCH ET AL.

Examiner

Joel M. Lamprecht

Art Unit

3737

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 May 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>3/16/07</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 5/25/07 have been fully considered but they are not persuasive to overcome all the rejections of the current application. Applicant's arguments with respect to the double patenting rejections have been accepted and the double patenting rejections have been withdrawn.

Applicant has referenced their specification, citing that their definition of holder is not taught by the Hoult reference. The examiner disagrees. The Hoult fabric bag holder is adjoined to the bore of the magnet through electrically connecting straps to the conductive layer, which surrounds the bore magnet (Figure 8). This holder is then configured to form a substantially complete RF shield when the bag is adjoined to the magnet, which comprises a layer for RF shielding (Col 9 line 39-Col 10 Line 36). The shield is substantially complete for the purposes of the Hoult et al patent, where substantially is defined by "an ample and satisfying amount" according to Merriam-Webster. With respect to the argument that one of ordinary skill in the art it is appreciated that while the word "magnetic" does not always imply radio frequency shielding, the Palkovich patent in question contains embodiments which in fact provide shielding for an MR system which uses electromagnetic force (Abstract and introduction) which would encompass the RF spectrum as it is a portion of the electromagnetic spectrum.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoult et al.'278 (US Patent No. 5,735,278) in view of Palkovich et al.'217 (US Patent No. 5,012,217). Hoult et al.'278 teach a system for providing RF shielding comprising: a holder or canopy comprising holder-RF-shielding (see col. 10, lines 15-50; and particularly referring to element 72 or electrically conductive fabric bag; note that as evidenced by the Merriam-Webster definitions a canopy is a protective covering); and a magnet comprising magnet-RF-shielding (see layer 71 of Figure 8 which is the magnet RF shielding and see col. 10, lines 15-24) and also see col. 10, lines 36-44; referring to the combining of the holder-RF-shielding and the magnet-RF-shielding to form a substantially complete RF shield. The whole holder includes RF shielding and therefore inherently any of its sub-parts such as the bottom portion would necessarily include RF shielding. Hoult et al.'278 does not explicitly teach that the magnet itself comprises RF shielding, meaning that there is no explicit recitation that the magnet *has itself* sufficient RF shielding in that it is a superconducting magnet with an inner diameter having a cryostat made of radio-opaque material rather it is associated with RF shielding, which broadly suggests it is a part of the "substantial RF shielding of the system". In the same field of endeavor, Palkovich et al.'217 teaches the magnet itself comprises RF shielding, meaning that the magnet has sufficient RF shielding in that it is a superconducting magnet with an inner diameter having a cryostat made of radio-opaque material (see col. 6, lines 4-12 and col. 6, lines 53-61; wherein iron is radio-

Art Unit: 3737

opaque). It would have been obvious to one skilled in the art at the time that the invention was made to have modified Hoult et al. '278 and incorporated the teaching of Palkovich et al. '217 of using his particular magnet arrangement with the cryostat in order to increase the RF shielding of the system (see col. 6, lines 53-61 indicating a four-fold increase of the shielding factor).

2. Hoult et al. '278 teach the locomotion of a patient into the imaging volume as indicated in figure 8 having wheels or rollers as indicated. Hoult et al. '278 further teach the use of an RF antenna on the patient support unit as indicated by element 18 in Figure 8 (also see col. 5, lines 20-22).

3. The opening of the canopy is interpreted as the aperture, which connects the two parts of shielding, the holder and the magnet. It would have been obvious to have combined the Palkovich reference with the RF shielding system of Hoult et al for the purpose of providing a magnet which is not merely *associated* with RF shielding, but which contains additional shielding for prevention of unnecessary electromagnetic fields during a procedure.

Conclusion

1. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

Art Unit: 3737

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

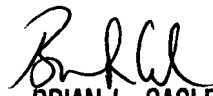
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joel M. Lamprecht whose telephone number is (571) 272-3250. The examiner can normally be reached on Monday-Friday 7:30AM-4PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian L. Casler can be reached on (571)272-4956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JML

9/29/07


BRIAN L. CASLER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700